

In the Specification:

Please amend paragraph 1 on page 1 as follows:

The invention relates to an X-ray imaging method, comprising the forming of a set of a plurality of two-dimensional X-Ray projection images of a medical or veterinary object to be examined through a scanning rotation by an X-Ray source viz à viz said object, which X-Ray images are acquired at respective predetermined time instants with respect to a functionality process produced by said object, and from said set of X-Ray projection images reconstructing by back-projection a three-dimensional volume image of said object as being recited in the preamble of Claim 1.

Please amend paragraph 4 on page 1 as follows:

Now therefore, according to one of its aspects, the invention is characterized according to the characterizing part of Claim 1 the invention relates to an X-ray imaging method comprising the steps of forming a set of a plurality of two-dimensional X-Ray projection images of a medical or veterinary object to be examined through a scanning rotation by an X-Ray source viz à viz said object, which X-Ray images are acquired at respective predetermined time instants with respect to a functionality process produced by said object; reconstructing by back-projection a three-dimensional volume image of said object from the set of X-Ray projection images, and deriving an appropriate motion correction for the respective two-dimensional images as based on a motion vector field, and subsequently from the various corrected two-dimensional images reconstructing the intended three-dimensional volume.

Please amend paragraph 5 on page 2 as follows:

The invention also relates to a three-dimensional X-Ray apparatus being arranged for implementing a method as claimed in Claim 1 comprising the steps of forming a set of a plurality of two-dimensional X-Ray projection images of a medical or veterinary object to be examined through a scanning rotation by an X-Ray source viz à viz said object, which X-Ray images are acquired at respective predetermined time instants with respect to a functionality process produced by said object; reconstructing by back-projection a three-dimensional volume image of said object from the set of X-Ray projection images, and deriving an appropriate motion correction for the respective two-dimensional images as based on a motion vector field, and subsequently from the various corrected two-dimensional images reconstructing the intended three-dimensional volume. Further advantageous aspects of the invention are recited in dependent Claims.

Please amend paragraph 11 on pages 2 to 3 as follows:

Now, the imaging apparatus 1 includes a C-arm 10 that is mounted on a partially shown stand 11. The C-arm can be rotated over an angle such as 180° around its center in the direction of double arrow a 20 through a motor drive not shown. The C-arm accommodates an X-Ray source 12 and an X-Ray image pick-up 13, that are aligned relative to each other in such a manner that an X-Ray image can be formed of a certain volume around the above center. These plural This plurality of X-Ray images show the volume under examination generated by respective different angular orientations of the image forming system 12, 13, that are in part shown by dashed lines. The pick-up device may be a series arrangement of an X-Ray image intensifier that feeds a television chain, while the signals furthermore are A/D converted (14) and stored (15), so that the complete examination yields a series of images (...D_{i-1}, D_i, D_{i+1}, D_{i+2} ...). These X-Ray images can themselves be processed by known reconstruction methods (16) to obtain a three-dimensional volume for examination. This volume or various projections

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therethrough can be displayed on monitor 18. The various subsystems of the imaging apparatus are controlled by controller 17. Another applicable apparatus could be based on multi-slice CT-scanning.